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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,311	09/28/2005	Yanzhong Dai	CN 030008	6437

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
PHAN, DAO LINDA	
ART UNIT	**PAPER NUMBER**
3662	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/551,311	DAI, YANZHONG	
	Examiner	Art Unit	
	Dao L. Phan	3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hopwood (Pat. No. 6,726,662) or Evans (Pat. No. 4,743,911).

Hopwood teaches a method and apparatus for beamforming based on broadband antenna, a base station system including a radio signal transceiving module, for receiving or transmitting radio signals; an effective antenna aperture computing module, for measuring the frequency of input signals of the antenna of the base station, and then determining the effective antenna aperture between elements of the antenna array of the base station according to the measured frequency, a weight vector computing module, for computing the weight vector of each element of the antenna array of the base station to the input signals according to the determined effective antenna aperture and the transmission function of the antenna array; a beam generating module, for multiplying the input signals with the weight vector of each element of the antenna array of the base station to the input signals, then combining them and outputting the beam signals. See fig. 1-5; col 1, line 55-col 2, line 45; col 3, line 54-col 5, line 10.

Hopwood further teaches a mobile terminal including a radio signal transceiving module, for receiving or transmitting radio signals; an effective antenna aperture computing module, for measuring the frequency of input

signals of the antenna of the mobile terminal, and then determining the effective antenna aperture between elements of the antenna array of the mobile terminal according to the measured frequency; a weight vector computing module, for computing the weight vector of each element of the mobile terminal to the input signals according to the determined effective antenna aperture and the transmission function of the antenna array; a beam generating module, for multiplying the input signals with the weight vector of each element of the mobile terminal to the input signals, then combining them and outputting the beam signals. See fig. 1-5; col 1, line 55-col 2, line 45; col 3, line 54-col 5, line 10.

Evans teaches a method and apparatus for beamforming based on broadband antenna, a base station system including a radio signal transceiving module, for receiving or transmitting radio signals; an effective antenna aperture computing module, for measuring the frequency of input signals of the antenna of the base station, and then determining the effective antenna aperture between elements of the antenna array of the base station according to the measured frequency, a weight vector computing module, for computing the weight vector of each element of the antenna array of the base station to the input signals according to the determined effective antenna aperture and the transmission function of the antenna array; a beam generating module, for multiplying the input signals with the weight vector of each element of the antenna array of the base station to the input signals, then combining them and outputting the beam signals. See fig. 3-7; col 1, line 5-col 2, line 20; col 3, line 51-col 6, line 23.

Evans further teaches a mobile terminal including a radio signal transceiving module, for receiving or transmitting radio signals; an effective antenna aperture computing module, for measuring the frequency of input signals of the antenna of the mobile terminal, and then determining the effective antenna aperture between elements of the antenna array of the mobile terminal according to the measured frequency; a weight vector computing module, for computing the weight vector of each element of the mobile terminal to the input signals according to the determined effective antenna aperture and the transmission function of the antenna array; a beam generating module, for multiplying the input signals with the weight vector of each element of the mobile terminal to the input signals, then combining them and outputting the beam signals. See fig. 3-7; col 1, line 5-col 2, line 20; col 3, line 51-col 6, line 23.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao L. Phan whose telephone number is (571)272-6976. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.